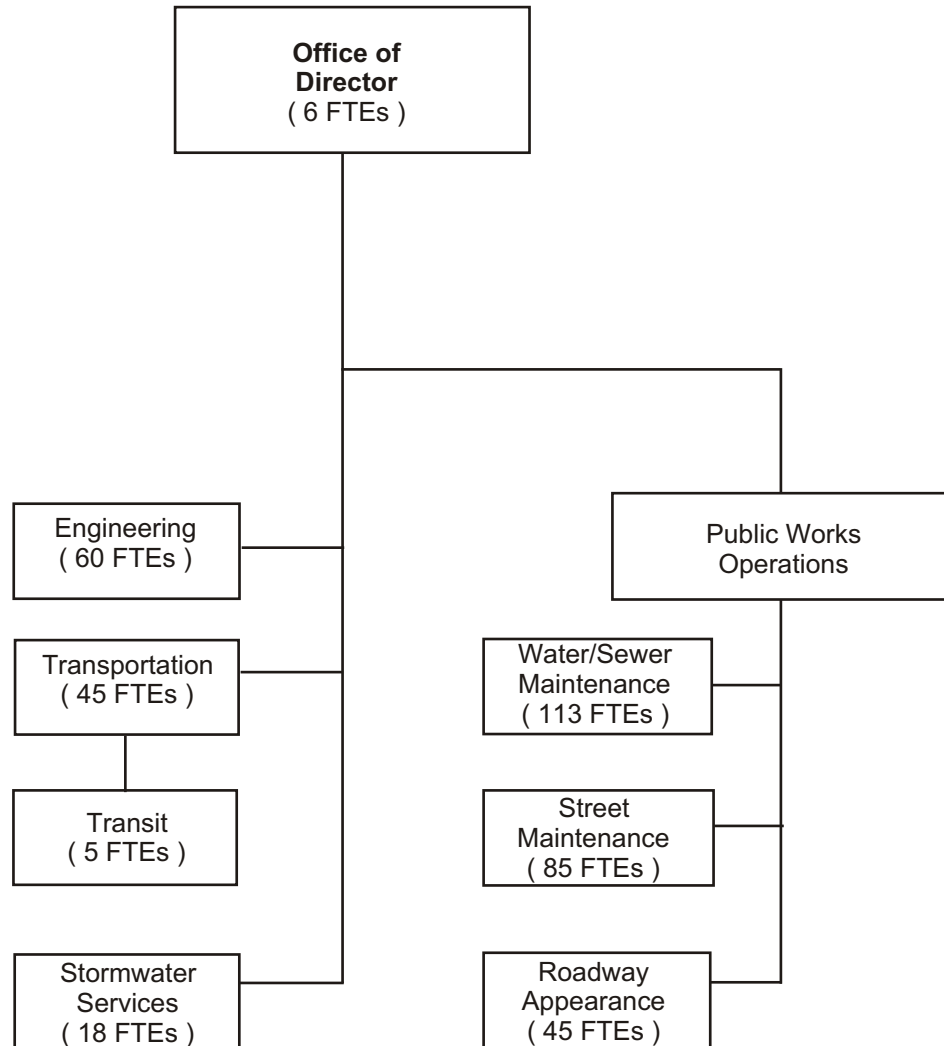




Public Works

(377 FTEs)



PUBLIC WORKS

Mission:

To improve, operate, and maintain the City's transportation and utility system in a manner that cost effectively enhances the community's livability.

RESOURCE ALLOCATION

	Actual FY 2000-01	Adopted FY 2001-02	Estimated FY 2001-02	Adopted FY2002-03	Change
<i>Non-grant</i>					
Appropriations					
Personal Services	\$ 13,742,084	\$ 14,696,740	\$ 14,438,068	\$ 15,530,771	5.7%
Operating	20,895,341	18,935,686	21,442,232	20,807,862	9.9%
Capital	1,285,537	816,637	1,010,827	2,820,334	245.4%
Other	55,009	70,986	25,606	72,014	1.4%
Total Appropriations	\$ 35,977,971	\$ 34,520,049	\$ 36,916,733	\$ 39,230,981	13.6%
Programs					
Office of the Director	\$ 510,658	\$ 472,664	\$ 464,274	\$ 468,972	-0.8%
Street Maintenance	5,445,686	5,116,485	5,922,666	5,713,455	11.7%
Water & Sewer Maintenance	6,170,732	6,870,500	6,564,782	6,575,035	-4.3%
Stormwater Maintenance	4,901,470	4,145,719	6,033,565	4,775,731	15.2%
Engineering	4,013,517	3,744,388	3,567,439	3,726,898	-0.5%
Roadway Appearance	1,708,008	1,606,883	1,620,108	1,863,035	15.9%
Transportation Services	4,126,878	4,181,850	4,119,680	4,116,381	-1.6%
Transit Services	9,100,982	8,381,560	8,624,219	11,991,474	43.1%
Total Appropriations	\$ 35,977,931	\$ 34,520,049	\$ 36,916,733	\$ 39,230,981	13.6%
Full Time Equivalents					
Public Works	168.42	160.47	161.47	157.47	(3)
Water & Sewer Maintenance	150.85	149.85	149.85	150.85	1
Stormwater Maintenance	50.49	58.55	58.55	58.55	-
Transportation Services	0.60	0.50	0.50	0.50	-
FTE Total	370.36	369.37	370.37	367.37	(2)
Part-times FTEs	2.00	2.00	2.00	-	(2)
Revenues					
General Fund					
Discretionary	\$ 12,423,973	\$ 10,656,808	\$ 11,414,374	\$ 11,597,647	8.8%
Program	1,147,989	1,991,373	1,907,816	1,873,074	-5.9%
Subtotal General Fund	\$ 13,571,922	\$ 12,648,181	\$ 13,322,190	\$ 13,470,721	6.5%
Water & Sewer Fund	8,332,504	9,271,570	8,860,684	8,916,162	-3.8%
Storm Water Fund	4,972,523	4,218,738	6,109,640	4,852,624	15.0%
Transit Fund	9,100,982	8,381,560	8,624,219	11,991,474	43.1%
Total Revenues	\$ 35,977,931	\$ 34,520,049	\$ 36,916,733	\$ 39,230,981	13.6%

Grants

Transit Grant

Personal Services	\$ 275,208	\$ 302,192	\$ 294,889	\$ 322,167	6.6%
Operating	1,869,816	72,529	2,314,453	53,406	-26.4%
Capital	7,131	2,142,508	1,396,042	2,361,877	10.2%
Total Appropriations	\$ 2,152,155	\$ 2,517,229	\$ 4,005,384	\$ 2,737,450	8.7%

Full-Time Equivalents	5.40	5.40	4.50	4.50	(1)
Part-time FTEs	-	-	-	-	-

Transit Grant Revenues	\$ 2,152,155	\$ 2,517,229	\$ 4,005,384	\$ 2,737,450	8.7%
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Transportation Planning Grant

Personal Services	\$ 310,050	\$ 308,030	\$ 308,030	\$ 310,165	0.7%
Operating	100,354	124,134	124,134	-	-100.0%
Capital	6,000	5,000	5,000	-	-100.0%
Total Appropriations	\$ 416,404	\$ 437,164	\$ 437,164	\$ 310,165	-29.1%

Full-Time Equivalents	4.24	4.24	4.13	4.13	(0)
Part-time FTEs	-	-	-	-	-

Transportation Planning Grant R	\$ 416,404	\$ 437,164	\$ 437,164	\$ 310,165	-29.1%
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FY 2002-03 BUDGET ISSUES

- The Public Works Department will work with the Assistant City Manager and the Human Resources Department to find solutions to its vacancy rate, retention issues and the hiring process.
- Street Maintenance will dedicate a crew to water and sewer cuts full time.

SUPPORT OF CITY COUNCIL PRIORITIES

Managing Growth:

- Public Works Engineering, Storm water Services and Transportation will conduct comprehensive plan reviews in a timely manner following established criteria and City guidelines for all plan submittals.
- Public Works Engineering will implement CIP Street, downtown, transportation, and water/sewer projects including contract preparation, bidding, design, and inspection and construction oversight.
- Public Works will provide infrastructure improvements in annexed areas in a timely fashion.
- Public Works Engineering will prepare and implement street, sidewalk, water/sewer petitions and assessments.
- Public Works Transportation/Traffic, Water/Sewer Maintenance, Street Maintenance and Roadway Appearance will repair, maintain and improve City infrastructure including streets, sidewalks, right-of-ways, storm drains, street trees, street lights, traffic signals, water/sewer lines, hydrants and water meters.

Public Safety:

- Public Works will work with the Police Department to locate high crime areas and install streetlights, as well as appropriate vegetation to discourage loitering, drug dealing, and theft.
- Public Works will maintain and repair infrastructure with public safety as primary goal.
- Public Works will continue to work with the Police Department to remove graffiti within 48 hours of notification.

DEPARTMENTAL EFFICIENCY MEASURES

- Through an agreement with DDI, Public Works will purchase a new sidewalk sweeper and receive a second one from DDI free to carry out increased sidewalk cleaning in downtown Durham.
- Roadway Appearance will purchase a replacement bucket truck and with existing Urban Forestry staff, eliminate contract tree trimming.
- Transportation's purchase of a new street centerline-marking vehicle reduces the City street marking cycle from 5 years to 3 years.
- Street Maintenance's new parabolic ditcher allows the crew to ditch City strip-paved streets more efficiently while improving the appearance.
- Roadway Appearance – Street Cleaning has improved productivity by making changes to its work schedule (4 day work week).

UNFUNDED ITEMS

Replace Traffic Counter	\$11,000
Traffic signal loop contract	\$50,000
Traffic signal operations consulting services	\$50,000
Thoroughfare Street Lights	\$102,000
Saturday Neighborhood Clean-Ups	\$10,000
Spring Clean	\$41,000
Landscape maintenance Crew for MLK Parkway & Fayetteville medians	\$290,000
Additional funds for street resurfacing	\$400,000
Pavement Marking Materials	\$100,000
DATA Service Reduction	\$324,000
Frozen Engineering Positions	\$100,000

PROGRAMS

Office of the Director

\$468,972

6 FTEs

The Office of the Director provides administrative, technical planning and leadership support for programs in the department.

GOAL: To attract, retain and maintain staff to carry out programs in the Public Works Department

OBJECTIVE: Reduce average vacancy rate

STRATEGY: Refine recruitment processes and survey operations staff for retention purposes

MEASURE:	Actual FY 2001	Adopted FY 2002	Estimated FY 2002	Adopted FY 2003
Average vacancy rate	13%	13%	13%	13%

OBJECTIVE: Reduce the lost-time incident rate

STRATEGY: Provide safety training and equipment

MEASURE:	Actual FY 2001	Adopted FY 2002	Estimated FY 2002	Adopted FY 2003
# Of lost-time injuries per 200,000 employee hours worked	10	10	10	9.5

OBJECTIVE: Recognize employee accomplishments and enhance morale.

STRATEGY: Publish monthly newsletter for Public Works employees.

MEASURE:	Actual FY 2001	Adopted FY 2002	Estimated FY 2002	Adopted FY 2003
# Newsletters published	N/A	N/A	12	12

Street Maintenance

\$5,713,455
85 FTEs

Responsibility for public roadway maintenance, street resurfacing, alley and sidewalk maintenance in the City, and the maintenance of the storm water drainage system within the City's right-of-way. Street Maintenance also plans and executes the City Winter Weather Plan to reduce the hazard to traffic created by snow and ice and debris from natural disasters. Through Municipal Agreement with NCDOT, the city receives a reimbursement for the cost associated with some maintenance for that part of the state Highway System that is within the city limits. Storm water charges for city streets are paid in this program.

GOAL: Provide maintenance and repair necessary for safe and well-maintained streets

OBJECTIVE: Contain cost increase for pavement repair on City streets

STRATEGY: Offset increased material costs by increasing productivity through employee training and accountability and use of pothole machine

MEASURE:	Actual FY 2001	Adopted FY 2002	Estimated FY 2002	Adopted FY 2003
Cost of pavement repair per mile of municipal street	\$1,700	\$1,700	\$1,650	\$1,750

OBJECTIVE: Perform preventive maintenance on storm water drainage system

STRATEGY: Equip and train employees in standard ditching procedures with new parabolic ditcher.

MEASURE:	Actual FY 2001	Adopted FY 2002	Estimated FY 2002	Adopted FY 2003
Linear feet of paved street ditching	185,000	250,000	160,000	150,000

Water & Sewer Maintenance

\$6,575,035
113 FTEs

The Water and Sewer division provides routine and emergency maintenance to the City's water distribution and wastewater collection systems. Typical tasks include the inspection, cleaning and repairing of water and sewer main trunk lines. The Water and Sewer division also operates and maintains fire hydrants and water valves, as well as installing and repairing water and sewer service connections. The Meter Shop provides routine and emergency response to water meter problems, including leaks, unusual consumption rates, and water pressure concerns.

GOAL: To provide efficient and effective maintenance and repair of all components of the water distribution and wastewater collection systems.

OBJECTIVE: Ensure all meters meet AWWA accuracy standards

STRATEGY: Continue scheduled testing of all large meters on a quarterly, semi-annual, and annual basis. Contract out the replacement of 5/8, 1, and 1 ½ inch meters by district (3 districts per year for 6 years)

MEASURE:	Actual FY 2001	Adopted FY 2002	Estimated FY 2002	Adopted FY 2003
# of tests conducted to detect defective large meters by routine testing of all 2"-10" meters	1,241	1,200	1,400	1,200

OBJECTIVE: Optimize and implement a systematic flushing program

STRATEGY: Coordinate, plan and schedule flushing with Environmental Resources to meet regulatory chloramines disinfections.

MEASURE:	Actual FY 2001	Adopted FY 2002	Estimated FY 2002	Adopted FY 2003
Miles of water line flushed per year	175	900	0	900

OBJECTIVE: Maintain the number of sewer blockages per system mile at June 2002 level.

STRATEGY: Contract out the cleaning of main trunk lines in identified problem areas. Continue emphasis on routine preventive maintenance

MEASURE:	Actual FY 2001	Adopted FY 2002	Estimated FY 2002	Adopted FY 2003
# Of sewer blockages per system mile	0.78	0.88	.087	.087

OBJECTIVE: Rehabilitation of 50,000 linear feet of wastewater collection main trunk line.

STRATEGY: Designate 2 small crews to clean, inspect, test and seal sewer lines utilizing a hydraulic jet truck, closed circuit TV equipment and chemical grout where applicable.

MEASURE:	Actual FY 2001	Adopted FY 2002	Estimated FY 2002	Adopted FY 2003
Linear feet of sewer lines tested	N/A.	N/A	N/A	50,000

Stormwater Maintenance

\$4,775,731
18 FTEs

Activities related to the construction, repair, cleaning, and maintenance of the storm water infrastructure and the location and mapping of the infrastructure. Storm water water quality management activities include industrial inspections and monitoring, public education, and illicit connections and the illegal disposal of wastes into the City's storm water system.

GOAL: *To minimize private and public property damage due to flooding and to minimize water quality impacts by responding to water pollution complaints and assuring compliance with all State and local storm water regulations.*

OBJECTIVE: Improve the process for locating and identifying sources of water pollution

STRATEGY: Promote the water pollution hotline via press releases and community outreach activities

MEASURE:	Actual FY 2001	Adopted FY 2002	Estimated FY 2002	Adopted FY 2003
Number of water quality violation letters issued within five days	75	85	85	85

OBJECTIVE: Calculate the average cost of remedial maintenance projects on private property

STRATEGY: Track remedial maintenance project costs through the cost management system

MEASURE:	Actual FY 2001	Adopted FY 2002	Estimated FY 2002	Adopted FY 2003
Average cost per remedial maintenance project	\$13,500	\$15,000	\$14,000	\$14,000

Engineering

\$3,726,898
60 FTEs

This program provides general engineering services, including contract administration, engineering design, surveying, construction inspection, mapping services, development review, NPDES permitting. A major activity is implementing the City's Capital Improvement Program for streets, thoroughfares, sidewalks, water extensions, and sewer extensions and the rehabilitation of the sanitary sewer system. The Engineering Design Section provides

professional engineering designs for street, sidewalk, storm drainage, water and sewer improvements as well as general engineering services. The Surveying Section provides surveying services necessary to support all the work units within the Engineering Division. The Construction Inspection Division provides for the inspection and monitoring of all extensions to the City's street, sidewalk, storm drainage, water and sewer systems. The Mapping Section provides for the system mapping of the City's street, water distribution and sewer collections systems. The Development Review Section provides comprehensive reviews and permitting of plans for conformance to City standards and specifications for infrastructure improvements. The Engineering Services Section is charged primarily with Customer Service responsibilities including petitions, ordering improvements, assessments and processing water & sewer service applications in addition to maintaining Powell Bill records.

GOAL: To ensure the safe and efficient expansion of the City's infrastructure.

OBJECTIVE: Improve condition of City streets

STRATEGY: Resurface City streets in accordance with priorities established by the ITRE Pavement Condition Survey

MEASURE:	Actual FY 2001	Adopted FY 2002	Estimated FY 2002	Adopted FY 2003
% Of City paved streets rated as 80 or above by Pavement Condition Survey-ITRE	65%	63%	62%	59%

OBJECTIVE: Maintain timely review of development's construction drawings.

STRATEGY: Use staff resources strategically to accomplish the objective

MEASURE:	Actual FY 2001	Adopted FY 2002	Estimated FY 2002	Adopted FY 2003
Average review time for construction drawings	2 weeks	2 weeks	2 weeks	2 weeks

Roadway Appearance

**\$1,863,035
45 FTEs**

This program combines the Street Cleaning, Right-of-Way Mowing, Urban Forestry and Impact Team functions to provide a variety of services intended to increase the positive visual image of Durham to residents and visitors. These include: street sweeping of curb and gutter streets; litter and dead animal removal from streets, ditches, and sidewalks; mowing, weed eating, edging and weed control along city streets; mowing and litter removal on key NCDOT corridors; tree maintenance and planting on streets, in parks, cemeteries, and other city owned properties; clean-up of illegal dump sites, city owned vacant lots and graffiti; employment of summer youth crew to pick-up litter; and implementation of the annual Durham Spring Clean

GOAL: To improve and maintain the City's rights of way in a manner that effectively enhances the community's livability and physical appearance while encouraging economic development

OBJECTIVE: Improve community street appearance during fall/winter period.

STRATEGY: Increase the number of street leaf collection cycles from October through January.

MEASURE:	Actual FY 2001	Adopted FY 2002	Estimated FY 2002	Adopted FY 2003
# Leaf collection cycles per period	2	3	2	3

OBJECTIVE: Improve customer response time for tree maintenance work.

STRATEGY: Implement use of City Works software in all work areas

MEASURE:	Actual FY 2001	Adopted FY 2002	Estimated FY 2002	Adopted FY 2003
Average monthly backlog of citizen tree				

Transportation Services**\$4,116,381****45 FTE's**

This program includes Transportation Planning, Traffic Services, Traffic Operations and Street Lighting functions of the Public Works Department. Transportation Planning responsibilities include comprehensive transportation system planning for the Metropolitan Planning Organization, development of the Transportation Improvement Program and related Clean Air Act compliance. Traffic Services includes development assistance, taxicab administration, and residential parking permits. Traffic Operations is responsible for the installation, operation, and maintenance of traffic control devices on public streets within the City, including the City's traffic control computer system. Staff also performs traffic studies, designs traffic signals, prepares pavement markings plans, and collects traffic data for traffic signal optimization. The Street Lighting program responsibilities include investigating requests for lighting, reporting outages, and ordering new installations through the City's two electric utility companies, Duke Power Company and Piedmont Electric Membership.

GOAL: Plan, operate, and maintain safe and efficient transportation systems for the City of Durham

OBJECTIVE: Improve lighting in selected areas of City.

STRATEGY: Install 400 additional residential streetlights in annexed areas, crime areas, and as requested by petition.

MEASURE:	Actual FY 2001	Adopted FY 2002	Estimated FY 2002	Adopted FY 2003
Cumulative # of street lights per 1,000 population	68	68	66	70

OBJECTIVE: Maintain Traffic Impact Analyses reviews within 8 weeks (for TIAs not reviewed by NCDOT)

STRATEGY: Assign a staff person primary responsibility for Traffic Impact Analysis and contract out work as necessary.

MEASURE:	Actual FY 2001	Adopted FY 2002	Estimated FY 2002	Adopted FY 2003
Average Traffic Impact Analysis review time (For TIAs not reviewed by NCDOT)	8 wks	8 wks	7 wks	4 wks

Transit**\$11,991,474****5 FTEs**

Plans for and administers the operations of the City's public mass transit system (DATA). The City operates a fixed route service and a Para-transit service through private contractors. The DATA fixed route service provides many people with a transportation option and many other people such as seniors and students with their only means of transportation. The DATA Para-transit service (ACCESS) provides a transportation option for citizens whose disabilities prevent them from using the fixed route service. Both services improve mobility and the quality of life within the community.

GOAL: To plan and oversee the provision of effective and efficient public transportation services

OBJECTIVE: Maintain fixed route ridership

STRATEGY: To monitor demand; modify and operate routes and schedules to improve service convenience; provide timely and accurate information; maintain facilities and equipment; improve safety and reliability; and promote a positive public image

MEASURE:	Actual FY 2001	Adopted FY 2002	Estimated FY 2002	Adopted FY 2003
Fixed route complaints per 1000 passengers	.0597	.0460	.0823	.0455

Operate fixed route within 0 – 5 minutes of
published schedule
Passengers per operating day

NA	95%	88.9%	95%
12,255	12,625	12,009	12,009

OBJECTIVE: To increase Para-transit efficiency by 1.2%.

STRATEGY: To monitor demand; modify scheduling and procedures to improve efficiency; transition people to the fixed route and other transit services; provide timely and accurate information; maintain facilities and equipment; improve safety and reliability; and promote a positive public image.

MEASURE:	Actual FY 2001	Adopted FY 2002	Estimated FY 2002	Adopted FY 2003
Para-transit complaints per 1000 passengers	.5743	.8000	.8702	.7500
Operate Para-transit service within +/- 15 minutes of scheduled time	93.25%	92%	93.67%	94%
Passengers per hour	2.030	NA	2.050	2.075

INITIATIVES COMPLETED FY 2001-2002

- Prepared and resurfaced 20 miles of City streets
- Improved Spreader Snow Plow Routes for Winter Weather Plan
- Updated and revised the City's Winter Weather Plan
- Completed the implementation of the Street Support Section in Street Maintenance
- Completed 53 drainage improvement or repair projects on private property or in the City rights-of-way
- Completed the acquisition and removal of homes funded by the hazard mitigation grant project
- Replaced or repaired 145 defective large meters
- Replaced 770 defective residential meters
- Developed and implemented an Apprenticeship Program to address staffing and improve division training
- Completed the inspection of 45 miles of wastewater collection force main trunk lines including air valves
- MLK Parkway – (NC 55 to Cook Rd) – all 4 lanes open for traffic)
- MLK Parkway – (Cook Rd. to Hope Valley Rd.) – open for traffic
- Completed Woodcroft Parkway extension
- 7 street projects designed and constructed
- Completed design of Stadium Drive
- Completed design of Corcoran Street Realignment
- 15,535 linear feet sidewalk constructed
- Completed Water Distribution Study
- 40 water & sewer projects designed and under construction
- Completed Fall 2001 and Spring 2002 NCDOT Litter Sweep Projects
- Expanded Spring Clean with Solid Waste's Waste Reduction Unit including electronics and bicycle recycling
- Reorganized daily litter removal downtown so that it is complete by 10 AM instead of 3 PM
- Changed street sweeping work schedule to increase productivity and reduce cycles from 6 weeks to 4 weeks
- Implemented 4 tree-planting projects, funded with donations from residents
- Increased Para-transit service efficiency by 1%
- Successfully implemented the fixed route and Para-transit services operating contracts
- Completed design of DATA operations, maintenance, and administrative facility, as well as preparations for construction bidding
- Completed short-range transit development plan
- Successfully implemented new fixed route service to the Streets at Southpoint
- Secured federal and state funding and obtained 15 Para-transit replacement vans
- Secured federal and state funding for the purchase of 32 fixed route replacement buses
- Contributed to the successful efforts of the North Carolina Public Transportation Association in increasing state funding for public transportation
- Implemented the City's Neuse River Basin Nutrient Sensitive Water Management Strategy
- Installed 600 new street lights
- Increased fixed route ridership 9%
- Completed signal system upgrade equipment installation

- Installed three new traffic signals, one flasher, and upgraded signal phasing at 5 intersections
- Coordinated traffic control plans for the I-85 widening project with NCDOT
- Applied 60 miles of white and 80 miles of double yellow pavement markings
- Conducted training for approximately 200 taxicab drivers
- Issued/renewed approximately 200 taxicab driver permits
- Issued approximately 30 new taxicab operating permits and processed the transfer of 40 others
- Reviewed 36 Traffic Impact Analyses (TIA's)
- Processed petitions for approximately 150 speed humps (including modified humps at 4 pilot locations)
- Prepared 2002-2010 Transportation Improvement Program and Draft Regional Priority List for 2004-2010
- Completed the Draft 2025 Long Range Transportation Plan
- Completed the US 15-501 Major Investment Study
- Completed the I-40 High Occupancy Vehicle/Congestion Management Study
- Completed three neighborhood traffic calming studies (West Club Blvd, Trinity Park, Parkwood)
- Added 150 on-street parking spaces in the Downtown area

MAJOR INITIATIVES FY 2002-2003

- Installation of electronic register and transponder on all large meters (1.5 to 10inch) as a cost saving/staffing measure and to insure accuracy and monthly meter reading, eliminating the need to estimate billing
- Complete the replacement of 5/8" residential meters (10,084) in three metering districts
- Complete first stream disengaging/clearing project
- Complete the storm water system inventory project and begin local creek basin studies
- MLK Parkway – (Cook Rd to Hope Valley Rd) – Phase I landscaping complete
- MLK Parkway (Hope Valley Rd to Old Chapel Hill Rd.) – under construction
- Complete construction of Stadium Drive and Fayetteville Road widening, Phase I
- Complete all remaining Street Paving 1996 Bond Projects
- Edith/Ninth Sewer Rehabilitation Project – under construction
- East Durham Outfall Rehabilitation Project – under construction
- Increase the number of leaf removal cycles by 50% between October and January, using a backup sweeper modified as a vacuum leaf collector in FY 02
- Write and propose an ordinance for Council approval regarding shopping cart removal, impoundment and disposal
- Implement a systematic tree maintenance program and measure its costs
- Maintain fixed route ridership and Para-transit service efficiency
- Begin construction and reach 75% completion of DATA operations, maintenance, and administrative facility
- Prepare for implementation of short-range transit development plan recommendations
- Complete purchase of 32 fixed route replacement buses
- Contribute to the efforts of the North Carolina Public Transportation Association in maintaining increased state funding for public transportation
- Review 36 TIAs
- Apply 60 miles of white and 60 miles of double yellow pavement markings
- Coordinate traffic control plans for the I-85 widening project with NCDOT
- Install 400 new street lights
- Issue/renew 200 taxicab driver permits
- Issue 10 new taxicab operating permits and process the transfer of 30 taxicab operating permits
- Adopt a conforming 2025 Long Range Transportation Plan
- Prepare the 2004-2010 Transportation Improvement Program (TIP)
- Update the Travel Demand Model
- Complete the NC 56/I-40 Transit Corridor Study
- Complete a 2002 Pavement Condition Study on City streets by ITRE.
- Complete the inspection of City owned bridges by NCDOT in accordance with the Federal Aid Highway Bridge Replacement and Rehabilitation Program